

Attorney Docket No. 2003P01328WOUS

IN THE CLAIMS:

Please cancel Claims 1 - 12 and add new Claims 13 - 32 as follows:

AMENDMENTS TO THE CLAIMS:

1 – 12 (Canceled)

13. (New) A gas burner for liquid fuel, especially vegetable oil, comprising:
an evaporator for evaporating the liquid fuel;
an evaporation chamber limited by a boundary wall;
a gas discharge channel for producing a gas jet formed in said boundary wall; and
said evaporator boundary wall constructed at least as a double-walled structure
with an inner wall and an outer wall.
14. (New) The gas burner according to claim 13, including said inner wall and said
outer wall of said evaporator formed from different materials.
15. (New) The gas burner according to claim 14, including said inner wall of said
evaporator formed from a chemically inactive material, such as stainless steel.
16. (New) The gas burner according to claim 15, including said outer wall of said
evaporator formed from a heat-conductive material, such as copper.
17. (New) The gas burner according to claim 13, including said inner wall of said
evaporator formed from a chemically inactive material, such as stainless steel.
18. (New) The gas burner according to claim 13, including said outer wall of said
evaporator formed from a heat-conductive material, such as copper.
19. (New) The gas burner according to claim 13, including said gas discharge
channel having an opening edge tapered from said evaporation chamber.

20. (New) The gas burner according to claim 19, including said tapered opening edge of said gas discharge channel constructed as substantially conical in shape enclosing a cone angle substantially between 50° and 70° .
21. (New) The gas burner according to claim 19, including said tapered opening edge connected to a constriction point formed in said gas discharge channel.
22. (New) The gas burner according to claim 21, including said constriction point of said gas discharge channel is constructed substantially as a hollow-cylindrical shape.
23. (New) The gas burner according to claim 13, including said gas discharge channel has an outlet opening edge constructed substantially as a conical shape enclosing a cone angle at least greater than about 15° to 20° .
24. (New) The gas burner according to claim 13, including said evaporator constructed as an evaporator tube.
25. (New) The gas burner according to claim 21, including said constriction point of said gas discharge channel constructed in said inner wall.
26. (New) The gas burner according to claim 25, including a gas jet opening constructed in said outer wall having a flow cross-section larger than a flow cross-section formed in said constriction point.
27. (New) The gas burner according to claim 21, including a gas jet opening constructed in said outer wall having a flow cross-section larger than a flow cross-section formed in said constriction point.

28. (New) A gas burner for liquid fuel, comprising:
 - the liquid fuel formed from vegetable oil;
 - an evaporator for evaporating said liquid fuel;
 - an evaporation chamber limited by a boundary wall;
 - a gas discharge channel for producing a gas jet formed in said boundary wall, said gas discharge channel having an opening edge tapered from said evaporation chamber;
 - said tapered opening edge connected to a constriction point formed in said gas discharge channel; and
 - said evaporator boundary wall constructed at least as a double-walled structure with an inner wall and an outer wall formed from different materials.
29. (New) The gas burner according to claim 28, including said evaporator constructed as an evaporator tube.
30. (New) The gas burner according to claim 28, including said constriction point of said gas discharge channel constructed in said inner wall.
31. (New) The gas burner according to claim 30, including a gas jet opening constructed in said outer wall having a flow cross-section larger than a flow cross-section formed in said constriction point.
32. (New) The gas burner according to claim 28, including a gas jet opening constructed in said outer wall having a flow cross-section larger than a flow cross-section formed in said constriction point.